

09/785,486 10/3/03

L60 ----- ANSWER 4 OF 23 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:487798 HCAPLUS

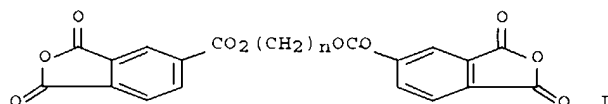
DN 122:241717

TI Electrically conductive adhesive films and their manufacture and bonding semiconductor elements using them

IN Yusa, Masami; Takeda, Shinji; Masuko, Takashi; Myadera, Yasuo; Yamazaki, Mitsuo

PA Johnson K. K., Japan

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 06145639	A2	19940527	JP 1993-193452	19930804 <--
	JP 3288146	B2	20020604		
	US 5667899	A	19970916	US 1995-482516	19950607 <--
	US 5605763	A	19970225	US 1995-560182	19951120 <--
PRAI	JP 1992-245395	A	19920916		<--
	JP 1992-247758	A	19920917		<--
	JP 1993-193452	A	19930804		
	US 1993-122868	B2	19930916		

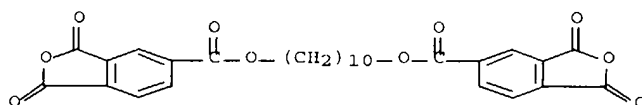


CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,10-decanediyl ester, polymer with 4,4'-methylenebis[2,6-dimethylbenzenamine] and 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 123046-43.5

CMF C28 H26 O10



AB The adhesive films comprise polyimides (A) having units of tetracarboxylic dianhydrides contg. .gtoreq.70 mol% I (n = 2-20) and diamines and 1-8000 parts elec. conductive fillers per 100 parts A and optionally contain 0.1-200 parts thermosetting resins per 100 parts A. A polyester film was coated with a compn. contg. 2,2-bis[4-(aminophenoxy)phenyl]propane-1,2-ethylenebis(trimellitate dianhydride) copolymer 100, Ag powder (TGG-1) 150, and AcNMe2 300 parts and heated 10 min at 80.degree. and 30 min at 150.degree. to give an adhesive film showing strength of bonding between a Si chip and a frame at 250.degree. >3 kg/chip.

IT 9003-35-4, H 1 103735-71-3, N 865 108563-19-5, ESCN 195 109190-39-8, Epo Tohto YDCN 702 122158-08-1, Plyophen VH 4170

RL: DEV (Device component use); POF (Polymer in formulation); USES (Uses) (blends with polyimides; elec. conductive adhesive films for bonding semiconductor elements)

RN 9003-35-4 HCAPLUS

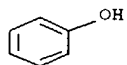
CN Phenol, polymer with formaldehyde (9CI) (CA INDEX NAME)

CM 1

CRN 108-95-2

09/785,486 10/3/03

CMF C6 H6 O



CM 2

CRN 50-00-0

CMF C H2 O



RN 103735-71-3 HCAPLUS
CN Epiclon N 865 (9CI) (CA INDEX NAME)

RN 108563-19-5 HCAPLUS
CN Sumiepoxy ESCN 195 (9CI) (CA INDEX NAME)

RN 109190-39-8 HCAPLUS
CN Epo Tohto YDCN 702 (9CI) (CA INDEX NAME)

RN 122158-08-1 HCAPLUS
CN Phenolite VH 4170 (9CI) (CA INDEX NAME)

IT 58883-54-8 146343-43-3 146393-87-5
147469-38-3 161554-43-4

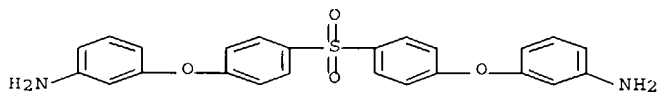
RL: DEV (Device component use); POF (Polymer in formulation); USES (Uses)
(elec. conductive adhesive films for bonding semiconductor elements)

RN 58883-54-8 HCAPLUS
CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl
ester, polymer with 3,3'-[sulfonylbis(4,1-phenyleneoxy)]bis[benzenamine]
(9CI) (CA INDEX NAME)

CM 1

CRN 30203-11-3

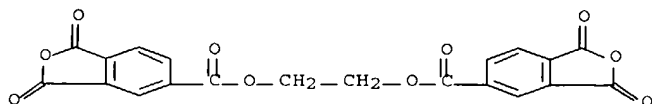
CMF C24 H20 N2 O4 S



CM 2

CRN 1732-96-3

CMF C20 H10 O10



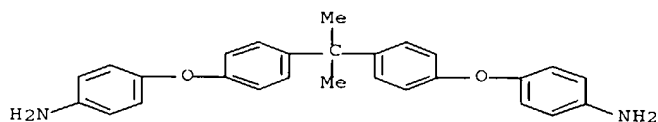
RN 146343-43-3 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,2-ethanediyl ester, polymer with 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 13080-86-9

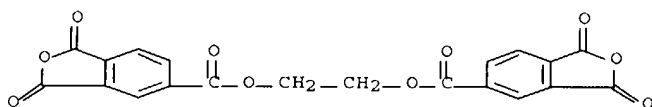
CMF C27 H26 N2 O2



CM 2

CRN 1732-96-3

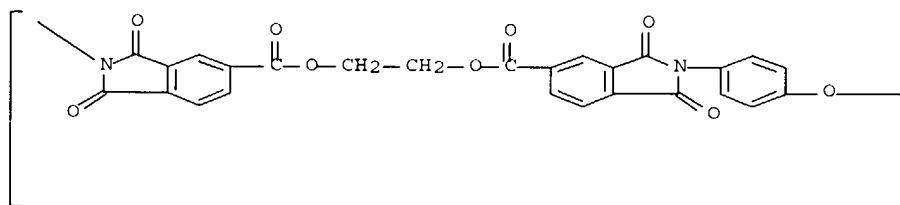
CMF C20 H10 O10



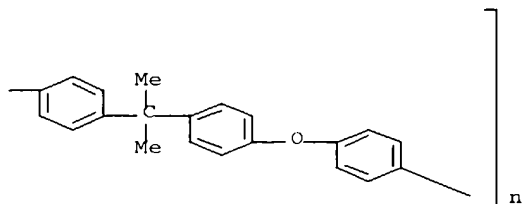
RN 146393-87-5 HCAPLUS

CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanediylloxycarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



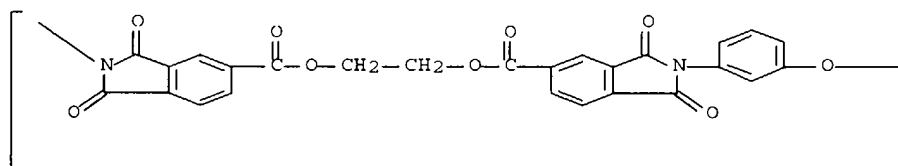
PAGE 1-B



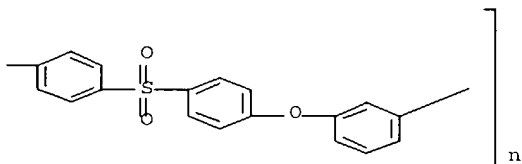
RN 147469-38-3 HCAPLUS

CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonyloxy-1,2-ethanedioxydicarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,3-phenyleneoxy-1,4-phenylenesulfonyl-1,4-phenyleneoxy-1,3-phenylene] (9CI)
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



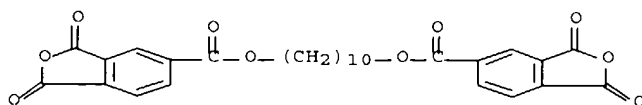
RN 161554-43-4 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,10-decanediyl ester, polymer with 4,4'-methylenebis[2,6-dimethylbenzenamine] and 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] (9CI)
(CA INDEX NAME)

CM 1

CRN 123046-43-5

CMF C28 H26 O10

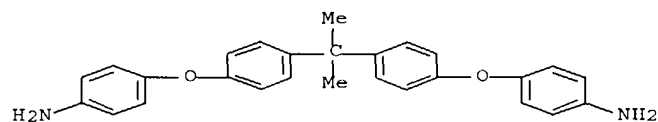


09/785,486 10/3/03

CM 2

CRN 13080-86-9

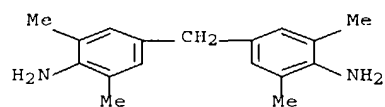
CMF C27 H26 N2 O2



CM 3

CRN 4073-98-7

CMF C17 H22 N2



IT 7440-22-4, Silver, uses
RL: DEV (Device component use); MOA (Modifier or additive use); USES
(Uses)
(elec. conductive filler; adhesive films for bonding semiconductor
elements)
RN 7440-22-4 HCAPLUS
CN Silver (8CI, 9CI) (CA INDEX NAME)

Ag:

CAS/STN FILE 'REGISTRY' ENTERED AT 07:34:00 ON 02 OCT 2003

L1	1492	S	DECAMETHYLENE
L2	500	S	TRIMELLITATE
L3	11	S	L1 AND L2
L4	11	S	10 AND 1 AND L3
L5	10	S	L4 AND BIS
L6	10	S	L5 AND ANHYDR#####
L7	61	S	1 10(2W)DECAMETHYLENE
L8	164	S	BIS TRIMELLITATE
L9	5	S	L7 AND L8
L10	1	S	123046-43-5
L11	1	S	"TRIMELLITATE ION(3-)" /CN
L12	2	S	("DECAMETHYLENE BIS(TRIMELLITATE) DIANHYDRIDE-4,4'- DIAMINODIPHENYL ETHER COPOLYMER"/CN OR "DECAMETHYLENE BIS(TRIMELLITATE) DIANHYDRIDE-4,4'-DIAMINODIPHENYLMETHANE COPOLYMER"/CN)
L13	95	S	123046-43-5/CRN
L14	77704	S	(POLYAMIDE/PCT OR "POLYAMIDE FORMED"/PCT)

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L15          7   S   L13 AND L14
L16          7   S   L15 NOT (L10 OR L11)
L17          7   S   L15 NOT (L10 OR L9)
L18         56   S   L7 NOT L6
L19          7   S   L17 NOT L6
L20          7   S   L17 AND BIS
L21          1   S   L4 NOT L6
L22         20   S   L3 OR (L9 OR L10 OR L11 OR L12) OR L15

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FILE 'HCAPLUS' ENTERED AT 07:48:59 ON 02 OCT 2003

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L23          48   S   L22
L24          27   S   L23 AND ADHE#####
L25         12121 S   DIEBOND##### OR DIE BOND### OR (WAFER OR
                      SEMICONDUCTI##### OR DICE OR CHIP) (3A) (BOND### OR ADHE####)
L26          22   S   L23 AND L25
L27          27   S   L24 OR L26
L28           0   S   L27 NOT HITACHI?/CS,PA
L29          13   S   L23 NOT HITACHI?/CS,PA
L30          27   S   L6 OR L12
L31          SEL PLU=ON L27 1- PN :          32 TERMS

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FILE 'DPCI' ENTERED AT 07:55:02 ON 02 OCT 2003

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L32           4   S   L31
L33          22   S   L31/PN.G
L34           8   S   L31/PN.D
L35          SEL PLU=ON L32 1- PN :          12 TERMS
L36          SEL PLU=ON L32 1- PN.G :         22 TERMS
L37          SEL PLU=ON L32 1- PN.D :         33 TERMS
L38          30   S   L33 OR L34
L39           4   S   L35
L40         551   S   L36
L41         185   S   L37
L42         722   S   L39 OR L40 OR L41 OR L38
L43          25   S   L35/PN.G
L44         724   S   (L42 OR L43)
L45          SEL PLU=ON L44 1- PRN :        1173 TERMS

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FILE 'HCAPLUS, WPIX, JAPIO' ENTERED AT 08:02:14 ON 02 OCT 2003

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L46         2271 S   L45
L47           0   S   L46 AND ?BENZENETRICARBOXYLIC?
L48           0   S   L46 AND ?BENZTRICARBOXYLIC?
L49           0   S   L46 AND ?BENZOTRICARBOXYLIC?
L50          32   S   ?TRIMELLITAT? AND L46
L51           2   S   ?DECAMETHYLEN? AND L46
                      D TI 1-2
L52          34   S   (L50 OR L51)
L53          10   S   L52 AND HITACHI?/CS,PA
L54          SEL PLU=ON L53 1- IC RN :         74 TERMS
L55         1380267 S   L54
L56           10   S   L53 AND L55
L57           24   S   L52 NOT L56
L58          SEL PLU=ON L57 1- IC RN :        150 TERMS
L59         1854903 S   L58
L60          23   S   L57 AND L59

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09/785,486 10/3/03

DN 127:263853
 TI Electrically conductive polyimide-based bonding films
 IN Yusa, Masami; Takeda, Shinji; Masuko, Takashi; Miyadera, Yasuo; Yamazaki, Mitsuo
 PA Hitachi Chemical Co. Ltd., Japan
 SO U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 122,868, abandoned.
 CODEN: USXXAM

DT Patent
 LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5667899	A	19970916	US 1995-482516	19950607
	JP 06145639	A2	19940527	JP 1993-193452	19930804
	JP 3288146	B2	20020604		
PRAI	JP 1992-245395	A	19920916		
	JP 1992-247758	A	19920917		
	JP 1993-193452	A	19930804		
	US 1993-122868	B2	19930916		

AB An elec. conductive bonding film useful in bonding an IC or LSI with a lead frame. The film comprises (A) a polyimide resin obtained by reacting a C2-20 alkylenebis(trimellitate anhydride) to .gtoreq.70 mol% with a diamine; and (B) an elec. conductive filler. Optionally, the film may further comprises a thermosetting resin or an imide compd. having at least two thermally crosslinking imido groups per mol.

IT 172028-43-2P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(elec. conductive polyimide-based bonding films for elec. app.)

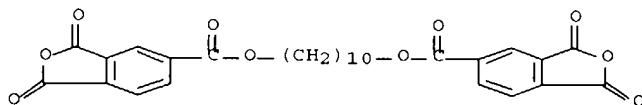
RN 172028-43-2 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,10-decanediyl ester, polymer with 5,5'-carbonylbis[1,3-isobenzofurandione], 4,4'-methylenebis[2,6-dimethylbenzenamine] and 4,4'-[(1-methylethylidene)bis(4,1-phenyleneoxy)]bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 123046-43-5

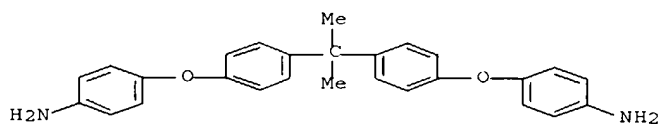
CMF C28 H26 O10



CM 2

CRN 13080-86-9

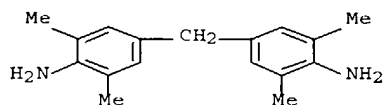
CMF C27 H26 N2 O2



CM 3

CRN 4073-98-7

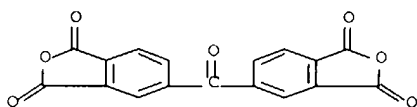
CMF C17 H22 N2



CM 4

CRN 2421-28-5

CMF C17 H6 O7



L30 ----- ANSWER 24 OF 27 HCAPLUS COPYRIGHT 2003 ACS on
STN

AN 1997:388596 HCAPLUS

DN 127:26063

TI Photoresist composition and manufacture of semiconductor device using the
same

IN Hasegawa, Yuji; Kato, Toshihiko; Yusa, Masaki; Miyadera, Yasuo

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09090629	A2	19970404	JP 1995-242904	19950921
PRAI	JP 1995-242904		19950921		

AB The title photoresist compn. comprises 100 parts of a polyamic acid contg. 15-100 mol. % structural repeating unit I (n = 2-16; X = divalent arom. group contg. ethylenic unsatd. group), 1-200 parts of an amine compd. R1R2C:CR3COOR5NR42 (R1-4 = H, C1-6 alkyl, Ph, vinyl, aryl; R5 = C2-6 alkylene) and 0.01-30 parts of a photoinitiator. The compn. is suitable for producing a polyimide coating.

IT 190058-99-2, 3,5-Diaminobenzoic acid ethyl methacrylate ester-1,10-(decamethylene)bis(trimellitate dianhydride) copolymer
RL: TEM (Technical or engineered material use); USES (Uses)
(photoresist compn. for manufg. semiconductor device)

RN 190058-99-2 HCAPLUS

CN 5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, 1,10-decanediyl ester, polymer with 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl 3,5-diaminobenzoate (9CI) (CA INDEX NAME)

CM 1